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The alien paradox

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1. Introduction

The ontology of platonic properties (universals) has much to recommend it and some of the reasons in its favour involve modal considerations. In this paper I begin by contrasting platonism with what Lewis (1986a) calls ‘ersatz’ approaches to modality, before constructing what I think deserves to be called a paradox. The paradox is one that platonism is well suited to solve in a simple and conservative way. The paradox in question concerns what we may call (following Lewis) *alien properties*. Alien properties are properties that are not actually instantiated but which might have been. I am by no means the first to discuss alien properties, but such discussions have tended not to take centre stage, even in the platonist literature.¹ Moreover, because of the recent development of truthmaker theory, we are now particularly well placed to formulate, and appreciate the force of, the paradox to be discussed.

2. Positioning platonism in the metaphysics of modality

Before presenting the paradox, it will be worthwhile to consider briefly why platonic theories of possibility have not been as widely held or explored as they might have been. Arguably, Lewis is partly to blame for the sidelining of platonism due to the way in which he presents the landscape of modal theories in *On the Plurality of Worlds* (1986a). There, Lewis critically compares two main

¹ Among the modal theorists who are overtly platonist in the sense discussed here are: Berman (2012), Bigelow & Pargetter (1990), Bird (2006), Forrest (1986) and Jubien (2007). Berman says recently that considerations about alien possibilities may favour platonism, but devotes only two paragraphs to the issue (2012: 122-23).

approaches, one being his own realism about other concrete worlds and the other being what he tendentiously calls ‘ersatz’ realism. The latter approach maintains that ‘... we can have one world only, and countless abstract entities representing ways that this world might have been’ (Lewis 1986a: 136). Among the candidate abstract representations that are criticized by Lewis are sets of sentences, structured pictures and unstructured propositions. The problem is, however, that when reading Lewis’s book, it is all too easy to assume that concrete modal realism and ersatzism are the only options available for those who take possibilities metaphysically seriously. But this is misleading, as Stalnaker (2012: 8-11) recently points out. There is a third approach, one which views possibilities as being abstract entities but does *not* view them as representational entities. Platonism is one such view and it holds that unrealized possibilities are properties (universals) which exist uninstantiated.² It is difficult to see why, on this view, one would ever think that the relationship between properties and property instantiations is a representational one. The thought behind platonism and other property-based views on modality is simply that uninstantiated properties *are* the ways that things might be rather than entities which merely *represent* the ways that things might be. Platonism should not therefore be thought of as a version of ersatzism.³

It is a shame that non-representational views such as platonism have tended to be sidelined, because arguably platonism is a stronger rival to Lewis’s modal realism than the ersatz approaches he carefully criticizes. The platonic, non-representational approach avoids most of the objections that Lewis rightly raises against ersatzism precisely because they concern the difficulty of explaining how an abstract representation could represent one possibility as opposed to another (Lewis, 1986a: 136-91). Moreover, a platonist is likely to think that ersatzism is wrong-headed from the start. Surely, a realist theory of possibility should tell us what it is that *determines* the facts about possibility. But it is

² Stalnaker also views the ways things might have been (the possibilities) as properties. But it’s not entirely clear that Stalnaker would class himself as a full-blooded platonist, as Bigelow and Pargetter point out (1990: 171).

³ Lewis (1986a: 139-41) characterises Stalnaker’s property-based view as ‘nondescript’ ersatzism. But as the above comments suggest, the reason why Stalnaker says little about the issue of representation is just that he does not think his abstracta (the properties) play a representational role, at least not where possibilities are concerned (Stalnaker 2012: 9).

far from clear how an abstract entity which merely *represents* a way the world could be can at the same time serve to *determine* that such a way is a way the world could be. In order for there to be an accurate representation of how things could be, surely there must be prior facts about how things could be, or so the objection would go.

In any case, even if these criticisms are successful, they provide only a negative justification for platonism and my main aim in this paper is to consider whether anything more positive can be said. I believe so, and now turn to what I call the *alien paradox*.

3. The alien paradox

Let us define an alien property as a property that is not instantiated in our world. It seems true to say that at least some such properties could have been instantiated. For instance, if we put our imagination to work, it is not difficult to have coherent thoughts about properties that have probably not been instantiated. So, why deny that instantiations of such properties are at least metaphysically possible? The property of being megagon-shaped (being a polygon of one million sides) provides a nice example of an alien property, assuming such a shape is not instantiated by any concrete thing.

The problem is that despite the plausibility of the idea that our world does not instantiate all the properties that it is possible for a world to contain, when the possibility of alien instantiations is considered alongside certain plausible assumptions about truth and existence, we find an inconsistency. Moreover, I think the assumptions in question are sufficiently plausible individually that they form what we may consider a paradox. The alien paradox comprises six propositions:

- (1) It is true that instantiations of alien properties are metaphysically possible (Possibility Principle).
- (2) Truths about what is metaphysically possible have truthmakers (Truthmaker Principle).
- (3) Truthmakers determine their corresponding truths (Determination Principle).
- (4) All truthmakers exist (Existence Principle).
- (5) Everything that exists is actual (Actualist Principle).

(6) Truths about alien properties are not determined by what is actual (Alienation Principle).

Of course, whether a group of propositions deserves to be called a paradox is not always clear-cut. But I think each of these propositions is sufficiently *prima facie* plausible that it would not be difficult to persuade a newcomer to these issues that each of them is individually true (more on this below). And yet, the six propositions are jointly inconsistent. Here is one way of expressing the paradox that results: We are pretty sure it is true that alien properties could have been instantiated (proposition (1)). Call this our starting assumption. The problem is that given further plausible assumptions about truthmaking and existence (propositions (2), (3), (4) and (5)), and alien properties (proposition (6)), we can no longer consistently maintain that instantiations of alien properties are indeed metaphysically possible. This is because there is nothing that could function as the truthmakers for truths about such possibilities. Such truthmakers would have to exist and be actual (propositions (4) and (5)), and yet proposition (6) says that truths about alien properties have nothing to do with what is actual. Hence, either the starting assumption or one of the further assumptions must be given up.

Propositions (3) and (4), the Determination and Existence Principles, are very difficult to reject (as we shall see). This leaves the Possibility, Truthmaker, Actualist, and Alienation principles as each being up for potential rejection. Indeed, rejecting *any one* of these four principles plausibly leaves us with a consistent set. But as with any paradox, only a philosopher with a theory can choose which proposition to reject. After discussing in more detail each of the six propositions and various possible solutions, I shall argue that platonism provides a particularly simple solution. This solution rejects proposition (6), the Alienation Principle, but does so in a way that vindicates the sorts of intuitions that make it appear plausible. To that extent, platonism offers a particularly conservative solution as compared with others. Although I cannot hope to establish conclusively that platonism is the best solution, I hope the discussion will at least show that a strong preliminary case can be made for platonism if we take contemporary truthmaker theory seriously.

Let us now examine each proposition. As observed earlier, the Possibility Principle (proposition (1)) seems overwhelmingly plausible. For how can we deny that there could have been a megagon-shaped thing? Sure, there might be some properties that could not be instantiated given the laws of nature that our world contains, but there seems no reason to deny that such instantiations are at least

metaphysically possible (that is, possible in worlds with different laws of nature). Despite this, such possibilities have been denied by some. At one time, Armstrong felt forced to deny even the metaphysical possibility of alien instantiations due to his immanent (aristotelian) realism about universals (1989: 55). But as far as solutions to the paradox go, this is clearly a radical one.

Proposition (2), the Truthmaker Principle, asserts that all truths about what is metaphysically possible have truthmakers, which is to say those truths are grounded in some aspect of reality. Anyone with realist intuitions will be inclined to agree, as do most of those engaging in the metaphysical debate with which we are concerned. The most straightforward reason for accepting this principle is that *all* truths have truthmakers. Armstrong calls this doctrine ‘truthmaker maximalism’ (2004: 5), and he urges all realist metaphysicians to accept it, because a serious metaphysics should not let truths ‘hang on air’ in a mysterious way (2004: 3). Moreover, to accept that some truths have truthmakers while some do not leaves us with a disunified metaphysics.⁴ There are philosophers who have denied the Truthmaker Principle, however. Mellor (2003: 213), for instance, argues that providing truthmakers for truths about possibility is to be avoided. This provides one way to solve the paradox above, because truths about alien properties would then fall outside of the scope of truthmaking requirements. But again, I do not think this solution should be high on our list of preferences. Cameron (2008a: 262-64) for one has argued vigorously against Mellor’s approach. And for the purposes of this paper, it suffices to highlight that the denial of truthmaker maximalism is a significant theoretical cost for those in the business of realist metaphysics, as Armstrong’s comments above indicate.⁵ This is not a conclusive argument, but it suggests that rejecting the Truthmaker Principle is a price worth paying only if we have little choice.

Proposition 3, the Determination Principle, is a way of expressing what Armstrong calls ‘truthmaker necessitarianism’ (2004: 5). To deny such a principle would be to hold that a state of affairs could make a certain proposition true in one case, while in another case that same state of

⁴ See Cameron 2008b for more detailed arguments for truthmaker maximalism.

⁵ Less so if one has anti-realist inclinations. But since this paper concerns the debate between metaphysical realists about possibility, we need not consider anti-realist approaches here.

affairs might *not* make the proposition in question true. It is very difficult to see how this could be. For instance, if something exists, it is hard to see how the proposition asserting that thing's existence could fail to be true. Indeed, Armstrong has offered a convincing *reductio* argument in favour of truthmaker necessitarianism (2004: 6-7). All in all, the Determination Principle looks secure.

Proposition (4), the Existence Principle, says that all truthmakers exist. Again, it is difficult to see how this could be denied. For how can something be a relatum of a truthmaking relation if it does not exist? There is, however, a sense in which some Meinongians might reject this principle. On one interpretation of their doctrine, unrealized entities do not exist in the full-blooded sense, but they do not *not* exist either. They inhabit a half-way house between existence and non-existence: they merely *subsist*. As long as we are happy for subsisting entities to make truths true, such as truths about alien properties, we can reject the Existence Principle and restore consistency. But again, to hold that there is a realm beyond the realm of existence is clearly radical, not to mention the fact that such a realm is open to the charge of obscurity.

Proposition (5), the Actualist Principle, states that everything that exists is actual. This again can seem uncontroversial because 'exists' and 'actual' are often taken as synonyms (see Lewis 1986a: 97). But as we saw earlier, Lewis (1986a) famously denies that truths about possibility are made true at our world (that is, the actual world). Rather, there are other spatiotemporally isolated concrete worlds that make true our possibility claims, and such worlds are not actual (they are only actual for the inhabitants of those worlds). Hence, Lewis's approach solves the paradox because the truthmakers for truths about aliens are non-actual entities, contrary to proposition (5).

My intention here is not to add to the vast amount of literature in which Lewis's view is criticized. For the purposes of this paper it suffices to say that, again, Lewis's theory cannot be considered a conservative solution, as is indicated, in part, by the incredulous stares he speaks of (1986a: 133). This is in contrast to platonism in the following sense. Although platonism solves the paradox by rejecting proposition (6), the Alienation Principle, it nonetheless has the resources to explain *why* the Alienation Principle strikes us as being plausible, and therefore does justice to some of its underlying intuitions. This is, I contend, a significant point in platonism's favour. Unfortunately, Lewis's rejection of the Actualist Principle is rather more unabashed.

Finally, then, we come to the all-important Alienation Principle, proposition (6), which says that truths about alien properties are not determined by what is actual. As mentioned above, platonism insists, contrary to this principle, that truths about alien properties *are* determined by what is actual. It does this by appealing to actual but uninstantiated universals as truthmakers (further details below). Incidentally, many ersatz theories would also reject the Alienation Principle. But we will not discuss ersatzism further given that some of the problems surrounding it were highlighted earlier.

Before examining this solution, why think that the Alienation Principle is plausible in the first place? I believe it is driven by two intuitions. First, truths about alien properties are precisely truths about *what remains unrealized*. Sure, the way an actual object is constrains what is actually true of *it*. But why should the features of such objects have anything to do with the metaphysical possibility of alien properties, which are not even instantiated and whose nature may be radically different? Second, and more importantly, surely what is metaphysically possible remains the same whatever happens to be actually realized. Even if our world had contained only, say, a handful of particles, surely the metaphysical (even if not physical) possibilities would remain as rich as they are. What this intuition implies is that the actual realized entities have no bearing whatsoever on which alien instantiations are metaphysically possible. To return to the example above, it is very difficult to see how a handful of particles could ground the vast array of truths about which instantiations are metaphysically possible.

Now, importantly the platonists can agree that if we focus only on the concrete parts of actuality, including all of the physical objects and their properties, then we are quite right in thinking that such things cannot determine which alien instantiations are metaphysically possible. Thus, the platonists can agree with the verdict drawn in the thought experiment above that a mere handful of actual particles could not determine this vast array of metaphysical possibilities. To that extent, platonism vindicates the sorts of intuitions expressed above.

The platonists go on to say, however, that when considering the range of actual entities that could serve as the truthmakers for these alien possibilities, we tend not to cast our net far enough. They can say this is perfectly understandable: it is physical objects and their concrete property instantiations that are the objects of our sensory experience, and so when we think of candidate truthmakers in the realm of the actual, it is natural that concrete entities first spring to mind. But if we cast our net further

into the sea of actuality, so to speak, the Alienation Principle can plausibly be rejected according to platonism, solving the alien paradox as a result. Let us see why.

For various reasons, platonists hold that there are purely abstract universals (properties), abstract in the sense that they transcend space and time. As full-blown realists about these universals, platonists hold that they are fully part of the furniture of our world: they are fully *actual*. The universals instantiated by concrete objects are the ones with which we are most familiar. However, not all universals need be instantiated. In principle, there could be many properties that have never been instantiated, either as a matter of coincidence or because the instantiations of such properties are incompatible with our laws of nature. And with such a view in play, alien properties can be dealt with in a remarkably simple way: the uninstantiated properties are the alien properties. When we say that alien instantiations are possible, what this means is that certain properties *could have been instantiated*, and this is made true by the fact that the relevant universals actually exist and are, so to speak, waiting to be instantiated.

At the heart of the platonic theory of possibility, then, is the distinction between a universal's being instantiated and being uninstantiated. Importantly, the distinction between a non-alien property and an alien property is not a distinction between what is actual and what is not actual. Both non-alien and alien properties are actual. The difference is just that while non-alien properties are instantiated, alien properties are not. Hence, to repeat, platonism is able to explain why proposition (6), the Alienation Principle, is *prima facie* plausible. When considering the realm of the actual, it is natural to think only of the instantiated parts of reality because, pretheoretically, that is all that actuality contains. Importantly, the platonist agrees that this part of reality cannot provide truthmakers for truths about alien possibilities and so agrees with our intuitions on that score -- unlike versions of actualism that do not countenance uninstantiated entities.⁶

⁶ Armstrongians are prominent examples of actualists who reject uninstantiated entities (see Armstrong 1989). As a result, Armstrongians cannot simultaneously accept the possibility of alien instantiations and vindicate the sorts of intuitions lying behind the Alienation Principle (at least, not if they accept Armstrongian truthmaker theory). For other criticisms of Armstrong's theory of possibility, see Schneider 2001.

This concludes the main outline of the platonic solution and some of the points in its favour. A final issue must be addressed, however. An opponent might object to the platonic theory as follows. Suppose we accept that there are actual platonic universals and that at least some of them are uninstantiated. Is there not still the further question of whether it is *possible* for those universals to be instantiated? If the claim that some alien property instantiations are possible amounts to the claim that some platonic universals could have been instantiated, do we not need further facts to dictate precisely which uninstantiated universals can possibly be instantiated and which cannot? If these further facts are needed, then the platonist account is incomplete. Worst still, if those extra facts are primitive modal facts, then the platonist has not made much progress in illuminating modality.

Let me end this section by briefly answering this worry. Although this is an important objection, the best answer is, like the platonists' answer to the alien paradox, one that is remarkably simple. The answer is that the notion of a universal which cannot possibly be instantiated is *incoherent*. In other words, the mere existence of a universal guarantees that it is instantiable, which is to say that it is metaphysically possible for it to be instantiated. Why think this? The reason is that what it means for an entity to be a universal is precisely that it be instantiable in more than one place: this is where its universality lies. This is to say, in other words, that *universals are repeatables*. Quite simply, if an entity did not have the potential to be exemplified by multiple particulars, then it would not be a repeatable, in which case we would have no reason to class it as a universal as opposed to some other kind of entity.⁷

4. Concluding remarks: extending platonism

In some ways the ambitions of this paper have been modest. I have argued that by constructing the alien paradox using insights from contemporary truthmaker theory, and by putting the paradox at

⁷ In a discussion of what they call 'consistent properties', I take it that Bigelow and Pargetter are making a related point: 'We maintain ... that there are no inconsistent properties. There are inconsistent predicates, of course, but they do not correspond to any universals. Only consistent predicates correspond to universals' (1990: 203).

centre stage, a strong preliminary case for platonism can be made. But even if this is right, much further work remains. There remains, for instance, the question of how platonists should ground truths about counterfactuals and metaphysically necessary truths. Here, I can only report that a dispositional essentialist theory of platonic properties may prove to be extremely productive (see, for example, Bird 2006 and Tugby 2013). There is also the important question of how platonists should understand possible worlds talk, which is pervasive in modal semantics. Bigelow and Pargetter (1990: 203-13) argue that platonism can straightforwardly offer a surrogate for Lewis's possible worlds, namely, *structured* uninstantiated universals that are of such complexity that they can constitute complete ways for a world to be. On the other hand, many have found the idea of structural universals to be suspect (see Lewis, 1986*b*) and so some may hope that enough truthmakers for modal truths can be found among the simple, unstructured universals, together perhaps with the relations between them (see Berman 2012, Jubien 2007 and Mumford 2004). The fact that platonism faces these different choices is no bad thing, and I look forward to further work on these issues. But however platonism is developed, I hope its benefits where the alien paradox is concerned are clear.⁸

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